

PROGRESA: An Overview

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PROGRESA is an innovative anti-poverty program of the federal government of Mexico. The program relies primarily on conditional cash grants to poor rural households to achieve two concurrent aims: (1) improving the current living conditions of eligible households, and (2) promoting investment by the same households in the human capital of their children, especially through improved school attendance and increased demand for basic health services. By conditioning eligibility for further cash payments on household compliance with a specified set of actions (e.g., maintaining school attendance above a specified threshold rate), the program provides clear and direct incentives for such investment. Based on a series of evaluations carried out under the aegis of the International Food Policy Research Institute (IFPRI), PROGRESA seems to have achieved considerable success, both in improving household welfare among the poor and in promoting increased investment in human capital.

This note summarizes the key features of PROGRESA's program design, along with preliminary evidence on its impact. In both respects, it relies heavily on the evaluations carried out by IFPRI. It then turns to the question of transferability: Does PROGRESA provide a general model that can be readily adapted by other developing countries, or are there features of the Mexican political-economic environment that helped PROGRESA to flourish, but would inhibit its transplantation to other settings?

BACKGROUND. PROGRESA was introduced in 1997, two years into the administration of President Ernesto Zedillo. At that point, Mexico had regained healthy economic growth, following the shock of the 1995 Tequila Crisis; continued economic integration with the United States under the North American Free Trade Agreement (NAFTA) offered the prospect of continued growth, barring further financial crises. To a large extent, these developments seemed to represent a return to the vigorous growth that Mexico had enjoyed prior to the debt crisis of the early 1980s. By 1997, Mexico's per-capita income -- \$7,590 at purchasing parity -- was the third highest among major Latin American nations, following Argentina and Chile (table 1). Mexico's social indicators were average or slightly better among upper-middle income developing countries: life expectancy of 72 years, primary school completion of 85 percent, near-universal primary enrollment.

Despite these achievements, poverty remains a substantial problem in Mexico. Indeed, official statistics show a steady *increase* in the share of households living below both the P\$1 and P\$2 a day international poverty lines between 1984 and 1995. The published figures are suspect and highly controversial, but there is broad agreement that poverty remains serious among indigenous groups, in remote rural communities, and among subsistence farmers -- categories that overlap heavily in practice. By the mid-1990s, a broad consensus had emerged that more effective efforts were needed to promote broader access to the opportunities being created through national economic growth. PROGRESA is an example of such an effort.

PROGRAM DESIGN: GENERAL. PROGRESA's scope is embodied in its full name: *Programa de Educación, Salud y Alimentación* (the Education, Health, and Nutrition Program.) The program provides an integrated package of cash subsidies and services aimed at improving

current welfare and long-term opportunities among poor households living in poor rural areas, with special emphasis on children and their mothers. Several features of PROGRESA's design deserve special attention:

- **Heavy reliance on cash transfers.** The program provides cash transfers to eligible households in the form of stipends to upper-primary and secondary school students, subsidies for school supplies for the same students, and a cash transfer for household nutrition. Together, the cash transfer averages 253 pesos per month, equal to 22 percent of average total income among participating households. Of course, cash is by nature fungible, so recipient households can spend the additional income as they see fit so long as they comply with program eligibility requirements. Most economists presume that recipients will generally view cash transfers as more valuable than a package of services costing the same amount but selected by the government.

Along with cash transfers, eligible households receive additional in-kind benefits: free basic health care, health education, and a nutritional supplement for children under age 5 and for pregnant and breast-feeding mothers.

- **Careful attention to behavioral incentives.** To achieve its goal of improving future opportunities for the nation's poorest, PROGRESA conditions eligibility on compliance with a set of clear-cut behavioral requirements, tracked through careful record-keeping. For example, to remain eligible for the educational grants, parents must enroll their children in school and ensure that they attend school at least 85 percent of the time. Similarly, in order to avoid promoting increased fertility, the educational grants are delayed until children reach the age of 7 (normally the age at which they enter the 3rd grade), and are subject to a family maximum. The size of the educational grants increases with age, responding to the fact that children's income-earning potential outside of school, and thus the temptation to pull them out of school and send them to work, rises as they get older. Finally, educational grants at the secondary level are higher for girls, in order to counteract gender bias against girls. These and other aspects of the incentive structure are explored in the next section.
- **Large scope.** The program was introduced in phases to an increasing number of localities between 1997 and early 2000, during which time certain program details were fine-tuned in response to initial experience. By the time it reached full scale, PROGRESA included nearly 2.6 million families, living in 72,000 localities spread among all 31 states of Mexico. At that point, the program was serving 40 percent of all rural families.
- **Careful targeting.** By targeting the poorest households in poor rural communities, PROGRESA stands in sharp contrast to previous GOM interventions, notably the long-standing tortilla subsidy and other general food subsidies. The latter benefited non-poor households to the same extent as poor ones, and thus represented a very expensive tool for achieving a limited impact on poverty. Through careful targeting, PROGRESA delivers large benefits exclusively to poor households, at a relatively limited budgetary cost (0.2 percent of GDP).

- **Exhaustively evaluated.** From the beginning, the GOM has strongly emphasized evaluation of the PROGRESA program. Partly to facilitate evaluation and identification of program details in need of fine-tuning, the program was introduced in phases to randomly selected localities. This allowed initial impacts in covered localities to be compared with control localities not yet reached by the program. To ensure credibility, the evaluation effort has been delegated to specialists from outside Mexico, under the overall management of IFPRI.
- **Integrated package of benefits.** PROGRESA has always delivered the various components of its benefit package as a package, seeking to take advantage of complementarities among improvements in infant and child, and maternal nutrition; educational participation; access to basic health services; and family income. The downside to this approach is that limits the range of questions that can be answered through evaluation: any benefits identified can only be linked to the overall package of interventions, rather than to any particular intervention within the package. The alternative would have been to pursue an explicit experimental approach with different mixes of benefits delivered to different households. Such an experimental approach would have helped in optimizing the mix of program components, but would have delayed the process of scaling up the program itself.
- **Complementary to other targeted programs.** Households participating in PROGRESA receive benefits from other targeted GOM interventions as well. Some of these interventions are explicitly complementary to PROGRESA, especially efforts to ensure that schools and health care facilities have the resources necessary to respond to the increased demand for their services created by PROGRESA. Others represent parallel programs affecting a partially overlapping set of poor households, such as the reformed milk and tortilla subsidies which the Zedillo administration converted into means-tested programs.

PROGRAM DESIGN IN DETAIL. As noted, PROGRESA's designers made special efforts to ensure that the incentives created by the program promoted behavior in line with the overall goals of the program, while minimizing perverse incentives. Some attention to these incentive structures and the program details that support them may be helpful.

Targeting mechanism. PROGRESA is targeted to specific households, who become eligible for the full range of program benefits. Targeting involves two stages. In the first stage, "marginal" rural communities are identified, using an index based on data from the national census. Among communities identified as marginal, eligibility is restricted to those communities with access to schools and public health facilities. In the second stage, the GOM performs a detailed survey of all households living in eligible marginal communities, and uses the resulting information to identify poor households, who then become eligible to participate in the program. Eligibility is to be re-assessed every three years. A consistent standard of household eligibility is applied across communities.

IFPRI's evaluation concludes that, although both steps contribute to the accuracy of targeting, relying on the first step alone, and extending benefits to all households living in marginal rural communities would be very nearly as effective. Moreover, adopting this approach would avoid causing resentment between households that do and do not receive benefits from PROGRESA, based on income differences that neither group perceives as significant. This conclusion is

specific to the circumstances of the Mexican countryside, and might or might not apply in other country settings (Adato et. al, 2000).

The integrated benefit package. PROGRESA simultaneously promotes improvements in all three dimensions of human capital: education, health, and nutrition. By doing so, the program seeks to take advantages of synergies among these three areas, such as the need for children to be healthy and adequately nourished in order to attend school regularly and to learn effectively. In principle, households can accept the educational benefits without the health and nutrition benefits or vice versa, but this is apparently quite rare in practice.

Education. The educational component of the program involves four sub-components:

- (1) A cash educational grant paid to mothers of children aged 7 to 18, so long as those children are enrolled in school and attend at least 85 percent of school days. The grants are paid every two months during the school year. The grant increases in size as the child progresses through school; in particular, the grant jumps significantly in 7th grade, to counteract the tendency for children to drop out of school following completion of primary school. At the secondary level, grants are higher for girls, to counteract cultural bias against girls' education in the target communities, related to the fact that the family loses any direct benefits from having invested in the education of its daughters when they marry and leave the family. The total grant increases with the number of children in school, up to a specified maximum. School enrollment and attendance are tracked through a simple but apparently reliable system of record-keeping.
- (2) A cash subsidy to cover the costs of purchasing school materials. Mothers of elementary school children receive the subsidy at the beginning of each school semester (again, conditional on regular attendance), while those of secondary school students receive a single, larger payment at the beginning of the school year.
- (3) Efforts to expand the supply and improve the quality of local schools, to ensure that increased attendance did not lead to a drop in educational quality for existing students.
- (4) Social marketing efforts to promote awareness among parents of the importance of schooling for their children's future.

Nutrition and Health. PROGRESA's nutritional and health component also involves four sub-components:

- (1) A package of primary health care services, emphasizing maternal and child health (including pre- and post-natal health) and family planning services. Regular attendance by mothers at scheduled appointments is tracked, and is required for the family to receive a bi-monthly cash payment. In principle, this payment is supposed to support increased food consumption, but in practice the family is free to decide how to spend it.
- (2) Training on nutrition and health topics. Training is delivered in the form of lectures aimed especially at mothers, and secondarily at other family members and other members of the community. Topics include hygiene, infectious diseases, immunizations, and family planning. The emphasis is on preventive health care, including how to prevent disease

through water treatment, safe food handling, and immunizations; how to recognize signs of disease; and how to treat common illnesses like diarrhea. Mothers' attendance at these lectures is also required to maintain eligibility for cash payments.

- (3) A complementary increase in the supply and quality of locally available health services, especially increased supplies of medicines and equipment for rural health clinics, plus additional training for the staff of those clinics.
- (4) Daily nutritional supplements provided to mothers with infants and small children, plus additional supplements for consumption by pregnant and lactating mothers. The supplements provide calories, protein, and vitamins and other micronutrients.

Total cash payments. Taken together, the cash transfers provided through PROGRESA substantially boost the income and potential consumption levels of participating households. For example, monthly payments to eligible households with school-aged children averaged 239 pesos during the 12-month period ending October 1999. These payments represented an increase of 21 percent over the total monthly expenditures of similar non-participating households. Of this total, 128 pesos was received as educational grants, 101 pesos as cash payments for nutrition, and 11 pesos to subsidize purchases of school supplies (Skoufias, 2001). Total cash payments increase with the number of school-age children, up to a maximum (750 pesos in the second half of 1999). Cash payments are updated twice a year, to keep pace with inflation.

EVIDENCE ON PROGRAM IMPACT. Very substantial program impacts have been identified in education, health, and nutrition. In addition, the cash payments are themselves sufficient to produce a substantial direct impact on the incidence of poverty.

Education. A wide range of educational impacts have been identified, based on evaluations by Schultz (2001) and by Behrman, Sengupta, and Todd (2000).

- Enrollment increases slightly at the primary level, but markedly at the secondary level. An important part of this increase reflects success in reducing drop-out between the final year of primary school and the first year of junior secondary school. Initial enrollment rates in 7th grade increased from 67 to 75 percent for girls, and from 73 to 78 percent for boys. Summed over grades 1 through 9, the identified changes in enrollment rates are projected to boost total years of completed schooling by 0.72 years among girls and by 0.64 years among boys – an increase of roughly 10 percent.
- Based on current wage patterns, the additional schooling noted above is projected to lead to an 8 percent increase in lifetime earnings. Meanwhile, these increased earnings imply a rate of return of 8 percent on the cash grants provided under the program.
- Compared against the alternative of using the same funds to build and staff additional junior secondary schools to reduce travel time to school in order to boost enrollment and attendance rates, the evaluation suggests that PROGRESA's demand-side approach is more cost-effective.
- Despite the program's emphasis on school attendance, the actual impact on attendance was much less than that on enrollment.

- No evidence was found of change in the number of hours children spend on homework, nor of changes in student achievement as measured by standardized tests.

Health, nutrition, and health-care use. Evaluation suggests that PROGRESA has achieved important impacts both on utilization of health care by poor households, and on important dimensions of health status (Gertler, 2000 and Behrman and Hoddinott, 2000).

- PROGRESA was found to increase health care utilization significantly, including nutrition monitoring visits and immunization rates. In addition, PROGRESA appeared to boost the frequency of pre-natal health care visits among women in the first trimester of pregnancy.
- Children's health improved as a result of improved nutrition and increased preventive care. Children up to 5 years old who were covered by the program had a 12 percent lower rate of illness.
- Health among adults also improved under the program, in such areas as ability to handle daily activities, fewer days of illness, and similar measures.
- Among children 12-36 months old, the incidence of stunting (abnormally low height-for-age ratio, a measure of malnutrition) was significantly lower in PROGRESA households. The impact was calculated to produce an extra 1 centimeter in growth per year on average. Existing evidence from Latin America suggests that such an increase in nutritional status might be expected to produce an increase in lifetime earnings on the order of 3 percent. Meanwhile, evidence from other settings suggests that better nourishment in early childhood leads to improved school performance in later years.

Direct impact on income poverty and household consumption. Although used to motivate desired changes in behavior, the cash payments and nutritional supplements directly expand the household's income and potential expenditures; as noted above, these benefits total around 21 percent of households' other income. The evaluations find no evidence of offsetting reductions in work effort or earnings by adults, though child labor is reduced – a desired outcome (Parker and Skoufias, 2000). Thus, except for the reduction in income from child labor, PROGRESA benefits represent a net increase in the incomes of eligible households. The IFPRI evaluations conclude that PROGRESA benefits reduce the headcount poverty rate by around 8 percent within the affected communities; the impact on the poverty gap is much stronger – around 30 percent.

Their expanded income enabled PROGRESA households to increase their total consumption expenditures by around 14 percent over non-PROGRESA households, and their expenditures on food by 10.6 percent. Caloric intake rose less (7 percent), with the additional increase in food spending going to improve the quality of the diet through additional purchases of vegetables and animal food products.

In sum. The hundreds of pages of evaluation documents produced by IFPRI provide further details on the issues covered above, as well as insights into a wide range of additional issues of impact and program design. (Readers can pursue these issues in greater depth by downloading

the evaluation papers at www.ifpri.org/themes/progresa.htm.) The general picture that emerges from this body of work is that PROGRESA has proved highly successful in meeting its direct objectives in reducing current poverty and in promoting increased investment in human capital, while also producing benefits in related areas such as women's status within the household and the community and household attitudes toward girls' education. The only major downside identified by the evaluation effort was the increased tension produced within communities by extending benefits to only a subset of the households. As noted above, targeting only to the community level would be nearly as effective, while avoiding this type of social conflict.

The IFPRI evaluations note, but do not pursue, evidence that certain issues are resistant to improvement through a program like PROGRESA. For example, the absence of any change in school test scores suggests that this kind of program may have an easier time motivating behaviors that are easily observable, like enrollment, than those that are much harder to observe, like learning effort. Similarly, the quality of schooling available in poor communities remains dependent on the effectiveness of the Ministry of Education's efforts to train and motivate teachers: without choice or increased voice in the educational system, parents and local communities remain passive consumers of the education offered to their children.

APPLICABILITY TO OTHER COUNTRIES AND SETTINGS. In light of PROGRESA'S considerable success in Mexico, the obvious next question is, can the same approach be applied to other developing countries?

Many of the general features of PROGRESA represent best practice by any standard, offering valuable lessons to a wide range of other countries. The careful attention to incentives, the use of an explicit experimental framework to identify program impacts, and the close attention to the resulting evidence through evaluation all fall under this category. Likewise, countries that decide to use targeted direct transfers as a means to combat poverty should follow Mexico's lead in taking advantage of the synergies among interventions in education, health, and nutrition. In addition, reduced reliance on general food subsidies in favor of programs that carefully target the poor would improve program efficiency in many countries.

In contrast, other aspects of the program may limit its direct applicability to other developing countries, especially those at lower levels of economic development and institutional capacity.

On the first point, the overall size and growth of the national economic pie are relevant to a country's ability to undertake a sizeable transfer program like PROGRESA: lower-income countries probably need not apply, while countries experiencing stagnation or decline will generally have difficulty breaking out additional fiscal resources to support new spending. In this context, the data in table 1 provide a useful basis for comparison. Within Latin America, only Argentina and Chile have higher levels of per capita income than Mexico; below it, only Costa Rica, Brazil, Colombia, and the Dominican Republic enjoy per capita incomes above P\$5,000. Among these countries, only Chile, Costa Rica, and the Dominican Republic have joined Mexico in achieving healthy recent growth in per capita income. PROGRESA might be readily adapted to circumstances in the first two, and possibly in all three. Elsewhere, economic and political-economic constraints would probably limit transferability in the near term.

Just as important as a country's ability to fund a program like PROGRESA is its ability to implement it effectively. PROGRESA's success strongly reflects significant capabilities in areas like data collection and record keeping, data analysis, program analysis, and implementation. For many countries, both inside and outside Latin America, these capabilities can by no means be taken for granted. Equally important, the program's reliance on cash transfers to large numbers of poor households – an important source of its success – makes it highly vulnerable to leakage, including large-scale corruption, unless this vulnerability is carefully and firmly dealt with at all levels of the program, especially at the top.

The right-most two columns of table 1 provide indicators pertaining to two relevant dimensions of institutional capability, based on information assembled by Kaufmann, Kraay, and Zoido-Lobaton (2002) and published in a recent World Bank working paper. In both cases, the indicator is a weighted average of subjective ratings from multiple sources, and is stated in terms of standard deviations above or below the mean for a much larger set of rich and poor countries.

“Government Effectiveness” measures the government's ability to carry out its own programs, including perceptions of the quality of public service provision, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to its stated policies. This indicator provides circumstantial evidence of governments' ability to carry out a reasonably sophisticated program along the lines of PROGRESA. On this scale, Mexico ranks third within Latin America, significantly behind Chile and Costa Rica. The only other countries in the region above the global mean on this indicator are Argentina (caught in a prolonged economic crisis) and Guyana (a low-income country). Other countries score significantly lower on this scale. This comparison reinforces the suggestion that the range of countries in a position to implement a program like PROGRESA as effectively as Mexico has might be fairly limited.

On the “Control of Corruption” scale, Chile and Costa Rica again come in at the top, but in this case Mexico scores substantially below several other countries in the region: Brazil, Peru, and the Dominican Republic. Yet no reports have emerged that PROGRESA has been subject to corruption, despite the inherent vulnerability created by the use of cash grants. One possible explanation for this paradox has been offered by Nancy Birdsall, former chief economist of the Inter-American Development Bank. Birdsall (2002) suggests that the secret of PROGRESA's success has been the combination of technical competence and crusading spirit offered by program's designer and champion, Santiago Levy, Mexico's Deputy Minister of Finance. Birdsall has publicly expressed concern that the program's success will survive a future transition to “routine” management, along with skepticism that it can be straightforwardly transplanted to other developing countries.

While by no means conclusive, these strands of evidence suggest the need for caution in attempting to transplant the more ambitious features of PROGRESA into other countries, especially those with much lower levels of government effectiveness as well as those vulnerable to corruption.

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Table 1: Comparative Data on Economic Performance, Social Indicators, and Governance:
Mexico vs. Other Latin America and the Caribbean, circa late 1990s

	Income per capita at PPP 1997	Average Growth in Real GDP 1996-2001 (%)	Life Expectancy at Birth 1997 (years)	Primary School Enrollment Rate, Net 1997 (%)	Primary School Completion Rate 1995 (%)	Secondary School Enrollment Rate, Net 1998 (%)	Government Effectiveness 2001	Control of Corruption 2001
Argentina	12,080	1.4	73	106.8	70.1	73.7	0.18	-0.36
Bolivia	2,250	3.1	61	97.1	n.a.	n.a.	-0.47	-0.72
Brazil	6,930	2.1	67	98.5	n.a.	n.a.	-0.27	-0.02
Chile	8,420	3.9	75	87.9	100.0	70.3	1.13	1.40
Colombia	5,760	1.0	71	86.7	73.0	45.6	-0.38	-0.39
Costa Rica	6,860	4.5	77	89.0	87.6	41.0	0.74	0.87
Dominican Republic	4,640	6.8	68	87.4	n.a.	52.7	-0.24	-0.20
Ecuador	3,120	1.0	69	96.7	85.2	45.9	-0.94	-0.98
El Salvador	4,140	2.9	69	80.6	76.7	37.5	-0.25	-0.33
Guatemala	3,490	3.6	64	82.7	49.6	n.a.	-0.63	-0.69
Guyana	3,580	2.5	64	85.4	91.4	n.a.	0.02	-0.45
Haiti	1,420	1.8	54	79.7	n.a.	n.a.	-1.32	-0.84
Honduras	2,360	2.8	66	n.a.	n.a.	n.a.	-0.58	-0.63
Mexico	7,590	4.5	72	102.4	85.6	56.1	0.28	-0.28
Nicaragua	1,870	5.0	68	77.3	50.5	32.7	-0.73	-0.80
Paraguay	4,640	0.7	70	91.7	78.4	42.0	-1.20	-0.97
Peru	4,570	2.1	69	103.1	n.a.	61.5	-0.35	-0.04

Sources: Growth rates calculated from International Monetary Fund, *World Economic Outlook September 2002*.
Government effectiveness and control of corruption from Kaufmann, Kraay, and Zoido-Lobaton, 2002.
All other figures from World Bank, *World Development Indicators 2002* CD-ROM.